UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

12/01/2003

ARENT FOX KINTNER PLOTKIN & KAHN, PLLC Suite 600 1050 Connecticut Avenue, N.W. Washington, DC 20036-5339

EXA	MINER
VU,	BAO Q
ART UNIT	PAPER NUMBER

2838
DATE MAILED: 12/01/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,592	02/27/2002	Koichi Inatomi	108075-00078	7431

TITLE OF INVENTION: DC-DC CONVERTER WITH CONTROL CIRCUIT CAPABLE OF GENERATING STEP-UP AND STEP-DOWN SIGNALS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	03/01/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATEN <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHT THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPO PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM TH MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THE STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOV REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (O AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is n claiming SMALL ENTITY status, check the box below and enclothe PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

 Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) w your ISSUE FEE and PUBLICATION FEE (if required). Even if the fec(s) have already been paid, Part B - Fee(s) Transmittal should completed and returned. If you are charging the fec(s) to your deposit account, section "4b" of Part B - Fec(s) Transmittal should completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (703) 746-4000 INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed wh appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, m have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up, with any corrections or use Block 1) 12/01/2003 ARENT FOX KINTNER PLOTKIN & KAHN, PLLC Certificate of Mailing or Transmission I hereby certify that this Fec(s) Transmittal is being deposited with the Un States Postal Service with sufficient postage for first class mail in an envel addressed to the Mail Stop ISSUE FEE address above, or being facsim transmitted to the USPTO, on the date indicated below. 1050 Connecticut Avenue, N.W. Washington, DC 20036-5339 (Depositor's na (Signat (D APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/083,592 02/27/2002 Koichi Inatomi 108075-00078 7431 TITLE OF INVENTION: DC-DC CONVERTER WITH CONTROL CIRCUIT CAPABLE OF GENERATING STEP-UP AND STEP-DOWN SIGNALS APPLN. TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE NO nonprovisional \$1330 \$300 \$1630 03/01/2004 **EXAMINER** ART UNIT CLASS-SUBCLASS VU, BAO O 2838 323-284000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent); individual a corporation or other private group entity ☐ governm 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee A check in the amount of the fec(s) is enclosed. → Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Advance Order - # of Copies U The Director is hereby authorized by charge the required fee(s), or credit any overpayment Deposit Account Number ________(enclose an extra copy of this form). Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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Suite 600 1050 Connecticut A	Avenue, N.W.		ART UNIT	PAPER NUMBER
Washington, DC 20036-5339			2838	
			DATE MAILED: 12/01/200	2

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after t mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a ha months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date th determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retriev (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



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Suite 600 1050 Connecticut A	Avenue, N.W.		ART UNIT	PAPER NUMBER	
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			DATE MAILED: 12/01/2001	3	

Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fec(s) Due" is filed in the Office on or after October 1, 2003, then t amount due will be higher than that set forth in the "Notice of Allowance and Fec(s) Due" since there will be increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fe Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in vie of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processi delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowan is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), t issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and t response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to t issue fee now due, then the difference between the issue fee amount at the time the response is filed and t previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eigh Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

By a small entity (Sec. 1.27(a))...................\$665.00

(b) Issue fee for issuing a design patent:

(c) Issue fee for issuing a plant patent:

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of t Office of Patent Publication at (703) 305-8283.